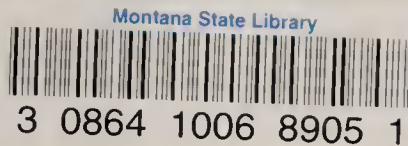


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ENVIRONMENTAL IMPACT STATEMENT

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Pursuant to: Montana Environmental Policy Act
Section 69-6504 (b) (3)

Project No. FG-5

Construction of a Residence at the Upper Unit
of the Big Springs Trout Hatchery at Lewistown

February 9, 1972

Prepared by

Montana Fish and Game Department
Fisheries Division
Helena, Montana

I. Purpose.

To construct a three-bedroom residence at the upper unit of the Big Springs Trout Hatchery, a State Fish and Game Department installation.

II. Description of the Project.

The proposed 48 ft. x 28 ft. residence will replace an old residence built in 1924. The old house is deteriorating to the point that it provides inadequate housing for the employee and his family now living there. Increased flows from underground springs around the house have caused water to flow through the basement and have flooded the septic tank and the drainfield system, necessitating pumping the tank weekly to prevent it from overflowing into Spring Creek.

The proposed site for the new residence is approximately 235 feet southwest of the residence to be replaced, just across Hanson Creek and opposite the other residence at the upper hatchery unit.

III. Description of Existing Environment.

A. Human Resources.

Present residence provides inadequate quarters for a hatchery employee and his family.

B. Physiography and Geology.

The residence to be replaced is situated on the northerly edge of Hanson Creek bottom land, quite near Big Spring. The site proposed for the new residence is on a level area southeast of the old residence and just across Hanson Creek. The soil is classified as loam to clay loam.

C. Land Use.

The proposed site for the new residence is a part of the area now used as a parking lot by the City of Lewistown. The drainfield for the new house would extend east of the structure and away from Hanson Creek.

D. Fish and Wildlife.

There will be no effect on fish and wildlife.

E. Vegetative Resources - Not applicable.

F. Climate - Not applicable.

G. Transportation System - Not applicable.

H. Utility Systems.

Digging and trenching will be necessary in a part of the parking area to install a septic tank and drainfield. The land can be returned to regular use following installation of the system.

IV. Evaluation of Environmental Impact.

A. Environmental Impact of Proposed Action.

The proposed action would eliminate the threat of sewage pollution to Spring Creek by removing the source. The old house will be abandoned as a residence and the disposal system of the new house will pose no threat to the stream.

B. Adverse Environmental Effects which cannot be avoided.

Temporary disturbance of the soil surface for installation of a septic tank and drainfield.

C. Alternatives.

Alternatives to the proposed action would be (1) to erect the new residence at some other site. This was investigated and the site selected appears most feasible on the basis of hatchery observation, access, drainfield construction and available land; (2) to continue to use the old house. This is not a satisfactory alternative since the house is inadequate, has water in the basement and has septic tank and drainfield problems that could result in Spring Creek pollution; (3) to relocate the drainfield. This was investigated and a suitable site could not be found; (4) to have the family find housing elsewhere. This would not be practical as the employee is needed on the grounds for hatchery supervision and weekend duty. It would be difficult to find housing anywhere near the hatchery.

D. Short-Term - Long-Term Use.

The old house, if retained, will be used only for storage. Both the water supply and sewerage will be shut off. If dismantled, the old house would provide negligible salvage. The new house would provide living quarters for an employee and family for the life of the building.

E. Irreversible and Irretrievable Commitment of Resource.

Construction materials used are committed for the life of the building. Salvage following discontinuance of use of the building would be negligible. The space occupied by the residence would not be available for use as a parking area.

F. Discussion of Problems and Objections by Other Agencies or the Public.

No problems or objections are foreseen.

V. Benefits.

Benefits to the environment include the removal of a source of pollution to Spring Creek.

VI. A Summary Statement.

Construction of a new residence at the upper unit of the State Fish Hatchery at Lewistown will remove from use an inadequate sewer system that could drain into Spring Creek. The system for the new residence will be properly designed and situated so as to pose no threat to soil or water environment in the area. It will consist of a 1,000-gallon septic tank located slightly over 100 feet from Hanson Creek. Percolation rate of the soil at the septic tank and drainfield site has not been taken by the Fish and Game Department or other agencies in the area. That the loamy soil does provide adequate percolation, however, is evidenced by the successful operation of the system at the residence across the access road from the proposed site. This system has performed satisfactorily since its installation in approximately 1940.

The proposed residence site is not subject to flooding. Like all of the other hatchery buildings, it is located on the relatively small Hanson Creek Drainage, just above the confluence of Hanson Creek with Big Spring Creek. There is no record of flooding at the proposed residence site in the nearly 50 years the hatchery has been in operation. Random USGS measurements show a maximum flow of 170 c.f.s. in Hanson Creek. A proposed SCS watershed dam on Hanson Creek, about one-half mile above the hatchery would effectively control stream flows and eliminate any future possibility of flooding. In the 25 years the USGS has operated a stream gauge station at a point just below the lower hatchery unit on Big Spring Creek, a maximum flow of 250 c.f.s. has been measured.

VII. A List of Mailing Distribution.

- ✓Department of Natural Resources.
- ✓Department of Planning and Economic Development.
- ✓Department of Health.
- ✓City of Lewistown.
- ✓Environmental Quality Council.
- ✓Lewistown Rod & Gun Club.
- ✓Dr. Dean Anderson, President, Trout Unlimited, Lewistown
- ✓Office of the Governor
- ✓Student Environmental Resources Center, U of Montana

